

Title (en)
METHODS FOR ACTIVELY BINDING HEPARIN TO CROSS-LINKED BIOLOGICAL TISSUES

Title (de)
METHODE ZUR AKTIVBINDUNG VON HEPARIN AN VERNETZTE BIOLOGISCHE GEWEBE

Title (fr)
PROCEDE DE LIAISON ACTIVE DE L'HEPARINE A DES TISSUS BIOLOGIQUES RETICULES

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Application
EP 98910231 A 19980306

Priority
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Abstract (en)
[origin: WO9846288A1] Methods for binding heparin to biological or synthetic materials which are to be implanted within a mammalian body. In instances where connective tissue proteins or other components of the material having adequate carboxyl groups present thereon, the method comprises (a) contacting the material with a carboxyl-activating agent, (b) contacting the material with a polyamine compound to form amide-bound polyamine side chains at the sites of the previously activated carboxyl groups, and (c) contacting the material with heparin such that heparin will become bound to the amino groups on the polyamine side chains. In other applications wherein the connective tissue proteins or other molecular entities of the material are devoid of or deficient in carboxyl groups, the method will comprise (a) contacting the material with a carboxyl-activating agent in combination with a polyamine compound which has functional carboxyl groups thereon such that at least some of the functional carboxyl groups of the polyamine compound will become activated and will react with some of the amino groups on the polyamine compounds to form a polyamine network interlocked within the molecular structure of the material, and (b) contacting the material with heparin such that heparin will become bound to amino groups on the polyamine network.

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